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09/475,696	12/30/1999	DARRYL L. DEFREESE	A-6307	6730

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EXAMINER
AKPATI, ODAICHE T

ART UNIT	PAPER NUMBER
2135	5

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 09/475,696	**Applicant(s)** DEFRESE ET AL	
	Examiner Tracey Akpati	**Art Unit** 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-64</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-64</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 December 1999</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    ~~Paper No(s)/Mail Date~~ received 7/9/02

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3/20/00 have been fully considered but they are not persuasive. With regards to Claims 1 and 17, the applicant argues *"The cited prior reference fails to disclose an entitlement number as claimed in claim 1."* The examiner asserts that the PID disclosed by Wasilewski (5420866) on column 16, lines 65-68, column 17, lines 1-19 show that the PID represent the entitlement number claimed by the applicant because the PID is revealed by the decoder and the PID value matches one of those listed in the program definition for the selected program. This is what is claimed in Claim 1 and 17 and is fully met by the reference.

Applicant's arguments with respect to claims 33, 49 have been considered but are moot in view of the new ground(s) of rejection. Please see new rejection for Claims 33-49 below. They are in bold for your convenience. All other rejections are hereby maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 33 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Wasilewski (5420866).

Claim 1: Wasilewski (5,420,866) teaches receiving at least one encrypted entitlement control

message corresponding to the service (col. 14, line 45-69), *5-15* decrypting each of the at least one

encrypted entitlement control message in the secure element (col. 13, lines 50-69 & col. 14, lines *col 14: 21-28*

1-20), and determining that the terminal is authorized to receive the selected service (col. 14,

lines 65-69 & col. 15, lines 1-17).

Claim 33: Wasilewski (5,420,866) meets the limitation "a processor having plural control

modules, a first control module controlling the processor to receive at least one encrypted

entitlement control message corresponding to the selected service" on column 9, lines 37-

58; "a secure element having at least one authorized entitlement unit number stored

therein and having plural control modules" on column 12, lines 61-68 and on column 13,

lines 1-2; "a second control module controlling the secure element to decrypt each of the at

least one encrypted entitlement control message" on column 14, lines 33-44; and "each

decrypted entitlement control message revealing at least one first entitlement number

associated with the selected service" on column 14, lines 45-48; and "a third control module

controlling the secure element to determine that the terminal is authorized to receive the

selected service when any first entitlement number of any decrypted entitlement control

message represents any number of the at least one authorized entitlement unit number" on

column 10, lines 8-28.

Claim 49: The limitation is similar to Claim 33 limitation and hence its rejection is similar.

The major difference between Claim 33 and 49 is that the ECM is authenticated. This is

met by Wasilewski (5,420,866) on column 9, lines 51-58 and column 14, lines 45-65.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
>
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
>
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
>
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
>
> manner in which the invention was made.

Claims 2, 3, 4, 5, 17-21, 27-29, 34-37, 43-48, 50-53, 62-64 are rejected under 35 U.S.C.

103(a) as being unpatentable over Wasilewski (5420866) in view of Pinder et al (5742677).

Claim 2: Wasilewski (5,420,866) teaches claim 1. Furthermore, Wasilewski teaches receiving

over a permanently available link, an entitlement unit table (col 15, line 41-59 and col. 16, line

41-65). Wasilewski fails to teach tuning the tuner of the terminal to the frequency associated

with the selected service. Pinder (5,742,677) teaches an analog and digital tuner that are tunable

according to the selected channel (col. 11, line 10-24). It would have been obvious to modify

Wasilewski's method of providing conditional access information to decoders to include Pinder's

tuning of a tuner to allow for transmitting on an out of band data link for authorization and

preventing the broadcast frequency from being obtained without authorization.

Claim 3: Wasilewski (5,420, 866) teaches claim 1, but fails to teach a step of receiving over a permanently available data link includes receiving the entitlement unit table over an out of band data link. Pinder (5,742,677) teaches tuning to an off-channel for data identifying the predetermined channel (col. 11, line 13-24) where the commands & data are supplied to an out - of-band data receiver (col. 12, line 44-49). It would be obvious to modify Wasilewski's providing conditional access information to decoders to include Pinder's off-channel tuning to transmit entitlements through a path separate from the video in order that tuning to the proper frequency can be authenticated.

Claim 4: Wasilewski (5,420, 866) teaches claim 1, but fails to teach a step of receiving over a permanently available link includes receiving the entitlement unit table (col. 11, line 13-24) incorporated in a data packet with initial power on frequency that is tunable by the tuner (col. 11, lines 10-24). Pinder (5,742,677) teaches tuning to an off-channel for data identifying the predetermined channel (col. 11, line 13-24) where the tuner is tunable over a frequency range (col. 11, line 10-24). It would be obvious to modify Wasilewski's providing conditional access information to decoders to include Pinder's off-channel tuning to transmit entitlements through a path separate from the video to allow the authentication data to be directed through another path besides the video for authentication.

Claim 5: Wasilewski (5,420,866) teaches claim 2, but fails to teach a step of receiving over a data link includes receiving the entitlement unit table incorporated in a data packet with each frequency that is tunable by the tuner (col. 11, line 10-24). Pinder (5742677) teaches tuning to

an off-channel for data identifying the predetermined channel (col. 11, line 13-24) where the tuner is tunable over a frequency range (col. 11, line 10-24). It would be obvious to modify Wasilewski's providing conditional access information to decoders to include Pinder's off-channel tuning to transmit entitlements through a path separate from the video to allow the authentication data to be directed through another path besides the video for authentication.

Claim 17: Wasilewski (5,420,866) teaches receiving at least one entitlement control message corresponding to the service (col. 14, line 45-49) and determining that the terminal is authorized to receive the selected service when any first entitlement number of any authenticated entitlement control message represents any number of the at least one authorized entitlement unit number (col. 14, line 65-69 and col. 15, line 1-17). Wasilewski fails to teach authenticating at least one entitlement control in the secure element (col. 8, line 11-29). Pinder (5,742,677) teaches the authorization to receive certain channels (col. 8, line 11-29). It would be obvious to modify Wasilewski's method of providing conditional access information to decoders to include Pinder's channel authorization to allow only the channels where the rights have been purchased to view.

Claim 18: Wasilewski (5,420, 866) in view of Pinder teaches claim 17. Further, Wasilewski teaches a first table incorporated as a Unit Map Table containing a program definition for each useable selected program (col. 15, line 41-59). Wasilewski fails to teach receiving the entitlement unit table incorporated in a data packet with each frequency that is tunable by the tuner (col. 11, line 10-24). Pinder (5,742,677) teaches tuning to an off-channel for data

identifying the predetermined channel (col. 11, line 13-24) where the tuner is tunable over a

frequency range (col. 11, line 10-24). It would be obvious to modify Wasilewski's teaching of

providing conditional access information to decoders to include Pinder's off-channel tuning to

transmit entitlements through a path separate from the video to allow the authentication data to

be directed through another path besides the video for authentication.

Claim 19: Wasilewski (5,420, 866) in view of Pinder teaches claim 18. Further, Wasilewski fails

to teach the step of receiving over a permanently available data link includes receiving the

entitlement unit table over an out of band data link. Pinder (5,742,677) teaches tuning to an off-

channel for data identifying the predetermined channel (col. 11, line 13-24) where the commands

& data are supplied to an out-of-band data receiver (col. 12, line 44-49). It would be obvious to

modify Wasilewski's teaching of providing conditional access information to decoders to include

Pinder's off-channel tuning to transmit entitlements through a path separate from the video in

order that tuning to the proper frequency can be authenticated.

Claim 20: Wasilewski (5,420, 866) in view of Pinder teaches claim 18. Further, Wasilewski fails

to teach a step of receiving over a permanently available link includes receiving the entitlement 9

unit table incorporated in a data packet that is included in a data stream associated with an initial

power on frequency that is tunable by the tuner. Pinder (5,742,677) teaches for data identifying

the predetermined channel (col. 11, line 13-24), the tuner is tunable over a frequency range (col.

11, line 10-36). It would be obvious to modify Wasilewski's teaching of providing conditional

access information to decoders to include Pinder's off-channel tuning to transmit entitlements

through a path separate from the video to allow the authentication data to be directed through another path besides the video for authentication.

Claim 21: Wasilewski (5,420, 866) in view of Pinder teaches claim 18. Further, Wasilewski fails to teach a step of receiving over a permanently available link includes receiving the entitlement unit table incorporated in a data packet that is included in a data stream associated with an initial power on frequency that is tunable by the turier. Pinder (5,742,677) teaches for data identif~ing the predetermined channel (col. 11, line 13-24), the tuner is tunable over a frequency range (col. 11, line 10-36). It would be obvious to modify Wasilewski's teaching of providing conditional access information to decoders to include Pinder's off-channel tuning to transmit entitlements through a path separate from the video to allow the authentication data to be directed through another path besides the video for authentication.

Claim 27: Wasilewski (5,420, 866) in view of Pinder teaches claim 17. Further, Wasilewski fails to teach receiving an encrypted entitlement management message addressed to the terminal and decrypting the encrypted entitlement management message in the secure element. Pinder (5,742,677) teaches a signal being transmitted scrambled and the descrambling to obtain restoration levels, sync pulses to be restored, etc. (col. 11, line 10-58) including an authorized entitlement unit number (col. 11, line 10-58). It would be obvious to modify Wasilewski's method of providing conditional access information to decoders to include Pinder's scrambled control message transmission and descrambling to be able to send the entitlement management message in a secure manner.

Claim 28: Wasilewski (5,420, 866) in view of Pinder teaches claim 27. Further, Wasilewski fails to teach the step of receiving an encrypted entitlement management message includes receiving the encrypted entitlement management message over an out of band data link. Pinder (5,742,677) teaches the commands & data are supplied to an out-of-band data receiver (col. 12, line 44-49) and a signal being transmitted scrambled (col. 11, line 10-58). It would be obvious to modify Wasilewski's method of providing conditional access information to decoders to include Pinder's scrambled control message transmission to be able to send the entitlement management message in a secure manner and to transmit over an out of band data link to allow for authorization.

Claim 29: Wasilewski (5,420,866) in view of Pinder teaches Claim 27. Further, Wasilewski fails to teach the step of receiving an encrypted entitlement management message includes reveiving the encrypted entitlement management message associated with each frequency that is tunable by the tuner. Pinder (5,742,677) teaches for data identifying the predetermined channel (col. 11, line 13-24), the tuner is tunable over a frequency range (col. 11, line 10-36). It would be obvious to modify Wasilewski's providing conditional access information to decoders to include Pinder's off-channel tuning to transmit entitlements through a path separate from the video to allow the authentication data to be directed through another path besides the video for authentication.

With respect Claims 34-37, 43-48, 50-53 and 60-64, all the limitation is met by Wasilewski except the limitations disclosed below, which is met by Pinder.

Claim 34: Pinder (5,742,677) teaches a processor further includes a control module controlling the processor (Fig. 3) to receive over a permanently available link an entitlement unit table (col. 11, line 13-24) and a control module controlling the processor (Fig. 3) to tune the tuner of the terminal to the frequency associated with the selected service (col. 11, line 10-36). It would have been obvious to combine the teachings of Pinder within the system of Wasilewski so as to allow for transmitting on an out of band data link for authorization and preventing the broadcast frequency from being obtained without authorization.

Claim 35: Pinder (5,742,677) teaches a control module to receive the entitlement unit table over an out of band data link (col. 12, line 44-49). It would have been obvious to combine the teachings of Pinder within the system of Wasilewski so as to tuning to the proper frequency can be authenticated.

Claim 36: Pinder (5,742,677) teaches a control module (Fig. 3) receiving entitlement unit table incorporating in a data packet on frequency that is tunable by the tuner (col. 11, line 10-36). It would have been obvious to combine the teachings of Pinder within the system of Wasilewski so as to tuning to the proper frequency can be authenticated.

Claim 37: Pinder (5,742,677) teaches a control module includes a control (Fig. 3) to receive the entitlement unit table (col. 12, line 13-24) that is tunable by the tuner (col. 11, line 10-36). It would have been obvious to combine the teachings of Pinder within the system of Wasilewski so that so as to tuning to the proper frequency can be authenticated.

Claim 43: Pinder (5,742,677) teaches a control module controlling the processor to receive an

encrypted entitlement management message addressed to the terminal (Fig. 3) and a control

module controlling the secure element to decrypt the encrypted entitlement management

message (col. 11, line 10-58) including an update of at least one authorized entitlement unit

number (col. 12, line 25-36). It would have been obvious to combine the teachings of Pinder

within the system of Wasilewski so as to be able to send the entitlement management message in

a secure manner to allow for authorization.

Claim 44: Pinder (5,742,677) teaches a control module receiving the encrypted entitlement

management message over an out of band data link (col. 12, line 44-49). It would have been

obvious to combine the teachings of Pinder within the system of Wasilewski so as to transmit the

entitlement management message over an out of band data link so as to allow for authorization.

Claim 45: Pinder (5,742,677) teaches a control module receives the encrypted entitlement

management message with each frequency that is tunable by the tuner (col. 11, line 10-58). It

would have been obvious combine the teachings of Pinder within the system of Wasilewski's to

be able to send the entitlement management message in a secure manner.

Claim 46: Pinder (5,742,677) teaches a control module to control the processor to receive an

entitlement management message addressed to the terminal (Fig. 3) and a control module to

control the secure element to authenticate the entitlement management message (col. 8, line 11

-29) including an update of at least one authorized entitlement unit number (col. 11, line 10-58).

It would have been obvious combine the teachings of Pinder within the system of Wasilewski's

to be able to send the entitlement management message in a secure manner.

Claim 47: Pinder (5,742,677) teaches a control module to receive the entitlement management

message (col. 12, line 25-36) over an out of band data link (col. 12, line 44-49). It would have

been obvious to combine the teachings of Pinder within the system of Wasilewski so as to be

able to send the entitlement management message over an out of band link to allow for

authorizaton.

Claim 48: Pinder (5,742,677) teaches a control module to receive the entitlement management

message associated with each frequency that is tunable by the tuner (col. 11, line 10-36). It

would have been obvious to combine the teachings of Pinder within the system of Wasilewski

so as to prevent the broadcast frequency from being obtained without authorization.

Claim 50: Pinder (5,742,677) teaches a processor includes a control module controlling the

processor to receive over a permanently available link an entitlement unit table (Fig. 3) and a

processor includes a control module controlling the processor to tune the tuner of the terminal to

the frequency associated with the selective service (Fig. 3). It would have been obvious to

combine the teachings of Pinder within the system of Wasilewski so as to allow for transmitting

on an out of band data link for authorization and preventing the broadcast frequency from being

obtained without authorization.

Claim 51: Pinder (5,742,677) teaches a control module to receive the entitlement unit table over

an out of band data link (col. 12, line 44-49). It would have been obvious to combine the

teachings of Pinder within the system of Wasilewski so as to tuning to the proper frequency can

be authenticated.

Claim 52: Pinder (5,742,677) teaches a control module receiving the entitlement unit table

incorporated in a data packet associated with an initial power on frequency that is tunable by the

tuner (col. 11, line 10-24). It would have been obvious to combine the teachings of Pinder within

the system of Wasilewski so as to tuning to the proper frequency can be authenticated.

Claim 53: Pinder (5,742,677) teaches a control module to receive the entitlement unit table

associated with each frequency that is tunable by the tuner (col. 11, line 10-24). It would have

been obvious to combine the teachings of Pinder within the system of Wasilewski so as to tuning

to the proper frequency can be authenticated.

Claim 62: Pinder (5,742,677) teaches a control module to control the processor to receive an

entitlement message addressed to the terminal (Fig. 3) and a control module to control the secure

element to authenticate the entitlement management message (col. 15, line 22-23) including an

update of at least one authorized entitlement unit number (col. 11, line 10-58). It would have

been obvious to combine the teachings of Pinder within the system of Wasilewski because

updating the authorized entitlement unit number would allow the conditional access system to be

up to date with the most recent data sent.

Claim 63: Pinder (5,742,677) teaches a control module to receive the entitlement management

message (col. 12, line 25-36) over an out of band data link (col 12, line 44-49). It would have

been obvious to combine the teachings of Pinder within the system of Wasilewski so as to allow

data to be transmitted through an out of band channel and hence allow for the authorization of

that data.

Claim 64: Pinder (5,742,677) teaches a control module includes a control module to receive the

entitlement message incorporated in a data packet associated with each frequency that is tunable

by the tuner (col. 11, line 10-36). It would have been obvious to combine the teachings of Pinder

within the system of Wasilewski so as to tuning to the proper frequency can be authenticated.

Claims 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder in

view of Wasilewski.

Claim 59: Pinder (5,742,677) teaches claim 49, Pinder fails to teach a control module to control

the processor to receive an encrypted entitlement management message addressed to the terminal

and another control module to control the secure element to decrypt the encrypted entitlement

management message including an update of at least one authorized entitlement unit number.

Wasilewski (5,420,866) teaches of a unit extracting incoming messages matching the value

desired (col. 14, line 45-69) and a decoder examining the program definition including a PID

(col. 13, line 50-69 and col. 14, line 1-20). It would be obvious to modify Pinder's information

terminal to include Wasilewski's module to control the processor and decrypt the encrypted

message for the control message can be utilized in effecting the operation of the system.

Claim 60: Pinder (5,742,677) in view of Wasilewski teaches claim 59. Further, Pinder teaches a

control module to receive the encrypted entitlement management message (col. 12, line 25-36)

over an out of band data link (col. 12, line 44-49).

Claini 61: Pinder (5,742,677) in view of Wasilewski teaches claim 59. Further, Pinder teaches a

control module to receive the encrypted entitlement management message incorporated in a data

packet associated with each frequency that is tunable by the tuner (col. 11, line 10-36).

Claim 6, 7, 9, 57 are rejected under 3 5 U.S.C. 103(a) as being unpatentable over

Wasilewski in view of La Berre.

Claim 6: Wasilewski (5,420,866) teaches claim 1. Wasilewski fails to teach a step of decrypting

the at least one encrypted entitlement control message includes recovering at least one control

word associated with decryption of a video component of the selected service. La Berre

(5,588,058) teaches a descrambling sequence being applied to a control word for video

transmissions (col. 3, lines 8-10 & col. 3, line 50-54 & col. 4, line 45-50). It would be obvious to

modify Wasilewski's module to control the processor and decrypt the encrypted message to include La Berre's decryption of the control word of a video transmission to allow for access to the necessary information required to obtain and view the video.

Claim 7: Wasilewski (5,420,866) teaches claim 1. Wasilewski fails to teach a step of decrypting the encrypted entitlement control message includes recovering one control word associated with decryption of an audio component. La Berre teaches a descrambling sequence being applied to a control word for audio transmissions (col. 3, lines 12-15 & col. 3, line 50-54 & col. 4, line 45-50). It would be obvious to modify Wasilewski's module to control the processor and decrypt the encrypted message to include La Berre's decryption of the control word of a video transmission to allow for access to the necessary information required to obtain and view the audio.

Claim 9: Wasilewski (5,420,866) teaches claim 1. Wisilewski fails to teach the step of decrypting one encrypted entitlement control message includes recovering one control word from one decrypted entitlement control message. La Berre (5,588,058) teaches a control word being recovered to be used during an odd or even phase (col. 4, line 46-57). It would be obvious to modify Wasilewski's module to control the processor- and decrypt the encrypted message to include La Berre's control word recovery to obtain the direction provided by the control word in decrypting a service component.

Claim 57: Wasilewski teaches claim 49. Wasilewski fails to teach a control module to recover

one control word from an entitlement control message. La Berre (5,588,058) teaches the use of a

control word to initialize (col. 4, line 46-57). It would have been obvious to modify Wasilewski's

information terminal to include La Berre's control word to provide a means to obtain a

functioning control word for directing the use of transmitted data.

Claims 8, 40, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wasilewski in view of Giachetti.

Claim 8: Wasilewski (5,420,866) teaches claim 1. Wasilewski fails to teach a step of receiving

encrypted entitlement control message includes demodulating an output of the tuner to recover a

data component. Giachetti teaches a demultiplexer/descrambler to produce a broadcast flow (col.

4, line 23-37 & col. 4, line 51-55). It would have been obvious to modify Wasilewski's module

to control the processor and decrypt the encrypted message to include Giachetti's demodulation

to recover a data component to allow the required information being transmitted to be accessed.

Claim 40: Wasilewski teaches claim 33 but fails to teach a control module to demodulate an

output of the tuner to recover a data component. Giachetti (5,742,681) teaches the

demultiplexer/descrambler to recover broadcast flows (col. 4, line 23-39). It would have been

obvious to modify Wasilewski's system to include Giachetti's demultiplexer/descrambler

to obtain the transmitted data for viewing/listening.

Claim 56: Claim 49 is similar to claim 56. In addition, Wasilewski fails to teach a control

module to demodulate an output of the tuner to recover a data component. Giachetti (5,742,68 1)

teaches a demultiplexei-/descrambler to obtain a useable broadcast flow. It would have been

obvious to modify Wasilewski to include Giachetti's demodulator to be able to recover the data

component to allow the transmitted data to be used.

Claims 38, 39, 41, 42, 54, 55 are rejected under 35 -U. S.C. 103(a) as being unpatentable over

Wasilewski in view of Welmer.

Claim 38: Wasilewski (5,420,866) teaches claim 33. Wasilewski fails to teach a control module

to recover one control word associated with decryption of an audio component of the selected

service. Welmer (4,980,912) teaches an entitlement received via a video channel that contains

specifications and instructions which allow for the decryption of a component (col. 5, line 54-68

and col. 6, line 1-48). It would have been obvious to modify Wasilewski's system to include

Welmer's control module to recover one control word associated with decryption to obtain the

control word necessary to access and/or use the audio transmission.

Claim 39: Wasilewski (5,420,866) teaches claim 33. Wasilewski fails to teach a control module

to recover one control word associated with decryption of an audio component. Welmer

(4,980,912) teaches an entitlement received via an audio channel that contains specifications and

instructions which allow for the decryption of a component (col. 5, line 54-68 and col. 6, line

1-48). It would have been obvious to modify Wasilewski's system to include Welmer's control module to recover one control word associated with decryption to obtain the control word necessary to access and/or use the audio transmission.

Claim 41: Wasilewski (5,420,866) teaches claim 33. Wasilewski fails to teach a control module to recover one control word from one decrypted entitlement control message. Welmer (4,980,912) teaches an entitlement received via an audio channel that contains specifications and instructions which allow for the decryption of a component (cot. 5, line 54-68 and col. 6, line 1-49). It would have been obvious to modify Wasilewski's system to include Welmer's control module to recover one control word associated with decryption to obtain the control word necessary to access and/or use the audio transmission.

Claim 42: The limitation of claim 41 is similar to Claim 42. Claim 41 rejection stands for claim 42. Wasilewski fails to teach a control module to control the processor to recover a. first encrypted service component and a decryptor to decrypt the encrypted service component using a first control word of one control word. Welmer(4,980,912) teaches the reception of information concerning entitlements being received and subjected to decryption operations (col. 6, line 34-48). It would have been obvious to modify the combination of Wasilewski's system to include Welmer's reception of entitlements to, once decrypted, utilize them in accessing data.

Claim 54: Claim 49 is similar to Claim 54. In addition to its rejection, Wasilewski fails to teach a control module to recover one control word associated with decryption of a video component.

Welmer teaches an entitlement received via a video channel that contains specifications and

instructions which allow for the decryption of a component (col. 5, line 54-68 and col. 6, line

1-48). It would have been obvious to modify Wasilewski's system to include Welmer's control

module to recover one control word associated with decryption to obtain the control word

necessary to access and/or use the video transmission.

Claim 55: Claim 49 limitation is similar to Claim 55 limitation. In addition to Claim 49

rejection, Wasilewski fails to teach a control module to recover one control word associated with

decryption of a audio component. Welmer teaches an entitlement received via an audio channel

that contains specifications and instructions which allow for the decryption of a component (col.

5, line 54-68 and col. 6, line 1-48). It would have been obvious to modify Wasilewski's system to

include Welmer's control module to recover one control word associated with decryption to

obtain the control word necessary to access and/or use the audio transmission.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski in

view of La Berre in view of Welmer in further in view of Pinder.

Claim 10: Wasilewski and La Berre fails to teach recovering a first encrypted service component

and decrypted service component using a control word. Welmer (4,980,912) teaches the

recovery of information entitlements from encrypted video/audio (col. 6, line 34-48). It would

have been obvious to modify Wasilewski and La Berre's system to include Welmer's recovery of

information entitlements to allow one component of the service to be utilized for one authorized

to use it. Pinder (5,742,677) teaches the modulation and pulsing of video and audio portions for

processing (col. 10, line 10-58). It would have been obvious to modify Wasilewski, La Berre and

Welmer's system include Pinder's encrypted service component to allow the data to be only

available to an authorized user.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski in

view of Pinder, further in view of Giachetti.

Claim 24: Wasilewski (5,420, 866) in view of Pinder (5,742,677) teaches claim 17. Wasilewski

fails to teach a step of receiving at least one entitlement control message includes demodulating an

output of the tuner to recover a data component. Giachetti (5,742,681) teaches a

demultiplexer/descrambler on the reception side to recover the 'broadcast flow (col. 4, line

23-37). It would have been obvious to modify Wasilewski's and Pinder's system to include

Giachetti's (demultiplexei-/descrambler to allow the broadcast flow to be obtained in a format

which can be utilized.

Claim 58 is rejected under 35 U.S.C. [03(a) as being unpatentable over Wasilewski in

view of La Berre, further in view of Welmer.

Claim 58: Wasilewski in view of La Berre teaches claim 57. The combination of Wasilewski and

La Berre fails to teach a control module to control the processor to recover a first encrypted service

component and a decryptor to decrypt the encrypted service component using a control word.

Welmer (4,980,912) teaches of the use of decryption key sub-stations to check data (col. 6, line

34-48). It would have been obvious to modify the combination of Wasilewski and La Berre's system to

include Welmer's decryption stations to allow the data to be authorized/decrypted in order that it

may be utilized.

Claim 11-16, 22, 23, 25, 26, 30-32 are rejected under'35 U.S.C. 103(a) as being

unpatentable over Wasilewski in view of Pinder, further in view of Welmer.

Claim 11: Wasilewski (5,420, 866) teaches claim 1. Wasilewski fails to teach receiving an

encrypted entitlement management message addressed to the terminal and decrypting the

encrypted entitlement management message in the secure element. Welmer (4,980,912) teaches

of the use of decryption key sub-stations to check data (col. 6, line 34-48). It would have been

obvious to modify Pinder's information terminal to include Weimer's decryption stations to allow

the data to be authoritized/decrypted in order that it may be utilized.

Claim 12: Wasilewski (5,420, 866) in view of Welmer (4,980,912) teaches claim 11. Wasilewski

fails to teach a step of receiving an encrypted entitlement management message over an out of

band data link. Pinder (5,742,677) teaches a wide band signal being received supplied by an out-

of-band data receiver (col. 12, line 44-49). It would have been obvious to modify Wasilewski's

module to control the processor and decrypt i[he encrypted message to include Pinder's message

reception over an out-of-band data link to allow for auithorization to occur without revealing the

frequency of transmission for video/audio.

Claim 13: Wasilewski (5,420, 866) in view of Welmer (4,980,912) teaches claim 11. Wasilewski

fails to teach a step of receiving an encrypted entitlement management message includes

receiving the encrypted entitlement management message incorporated in a data packet that is

tunable by the tuner. Pinder (5,742,677) teaches a digital tuner tunable according to channel

where a wide band signal is received across a communicati,c)ns network. It would have been

obvious to modify Wasilewski's module to control the processor and decrypt the encrypted

message to include Pinder's digital tuner tunable to allow the appropriate channel for

transmission to occur.

Claim 14: Wasilewski (5,420, 866) teaches claim 1. Wasilewski fails to teach receiving an

entitlement management message addressed to the terminal and authenticating the entitlement

management message in the secure element. Welmer (4,980,912) teaches of encrypted data

addressed to the subscriber (col. 6, line 34-48). It would have 'been obvious to modify

Wasilewski's module to control the processor- and decrypt the encrypted message to include

Welmer's encrypted data addressed to the subscriber. Pinder (5,742,677) teaches authorization

information authorizing subscribers (col. 8, line 11 -29). It Would have been obvious to modify

Wasilewski's module to control the processor and decrypt the encrypted message to include

Pinder's authorization information to allow only those who pay for the broadcast to receive it.

Claim 15: Wasilewski (5,420, 866) in view of Welmer (4,980,912) further in view of Pinder (5,742,677) teaches claim 14. Wasilewski fal'ils to teach a step of receiving an entitlement management includes receiving the entitlement management message over an out of band data link. Pinder teaches an out-of-band data receiver for receiving commands and data over a digital data channel (col. 12, line 44-49 and col. 12, line 25-36). It would have been obvious to modify Wasilewski's module to control the processor and decrypt the encrypted message to include Pinder's out-of-band receiver for entitlements on an out-of-band data link to allow for authorization to occur without revealing the frequency of the audio/video broadcast.

Claim 16: Wasilewski (5,420, 966) in view of Welmer (4,980,,912) further in view of Pinder (5,742,677) teaches claim 14. Wasilewski falls to teach a step of receiving an entitlement management message includes receiving the entitlement management message incorporated in a data packet associated with each frequency that is tunable by a tuner. Pinder teaches a tuner tunable according to a channel selection. Itwould have been obvious to modify Wasilewski's module to control the processor and decrypt the encrypted message to include Pinder's tunable frequencies to allow the designated broadcast to be obtained after authorization and the release of the audio/video broadcast frequencies.

Claim 22: Wasilewski (5,420, 866) in view of Pinder (5,742,677) teaches claim 17. Wasilewski falls to teach a step of authenticating the ent'itlement control message includes one control word associated with decryption of a video component. Welmer (4,980,912) teaches entitlements received via the audio/video channel checked by means of the decryption key (cot. 6, line 34-48),

It would have been obvious to modify Wasilewski's module to control the processor and decrypt

the encrypted message to include Welmer's recovery of a control word associated with

decryption to allow for the directing of the video process.

Claim 23: Wasilewski (5,420, 866) in view of Pinder (5,742,677) teaches claim 17. Wasilewski

fails to teach a step of authenticating the entitlement control message includes one control word

associated with decryption of a audio component. Welmer (4,980,912) teaches entitlements

received via the audio/video channel checked by means of the decryption key (col. 6, line 34-48).

It would have been obvious to modify Wasile,,vski's module to control the processor and decrypt

the encrypted message to include Welmer's recovery of a control word associated with

decryption to allow for the directing of the audio process.

Claim 25: Wasilewski (5,420, 866) in view of Pinder (5,742,6'77) teaches claim 17. Wasilewski

fails to teach a step of authenticating the entitlement control message includes recovering one

control word being a decryption key. Welmer (4,980,912) teaches entitlements received via the

audio/video channel checked by means of the decrypti~on key (,z~ol. 6, line 34-48). It would

have been obvious to modify Wasilewski's module to control the processor and decrypt the

encrypted message to include Welmer's recovery of a control word associated with decryption to

allow for the decryption of the entitlement messages broadcast which are needed for

authorization to occur.

Claim 26: Wasilewski (5,420, 866) in view of Pinder (5,742,(-)77) further in view of Welmer teaches claim 25. Wasilewski fails to teach a step of authenticating the entitlement control message includes recovering one control word being a decryption key. Welmer (4,980,912) teaches entitlements received via the audio/video channel checked by means of the decryption key (col. 6, line 34-48). It would have been obvious to modify Wasilewski's module to control the processor and decrypt the encrypted message to include Welmer's recovery of a control word associated with decryption to allow for the decryption of the entitlement messages broadcast which are needed for authorization to occur.

Claim 30: Wasilewski (5,420, 866) in view of Pinder (5,742,(577)teaches claim 17. Wasilewski fails to teach a step of authenticating the entitlement control message includes recovering one control word being a decryption key. Welmer (4,980,912') teaches entitlements received via the audio/video channel checked by means of the decryption key (col. 6, line 34-48). It would have been obvious to modify Wasilewski's module to control the processor and decrypt the encrypted message to include Welmer's recovery of a control word associated with decryption to allow for the decryption of the entitlement messages broadcast which are needed for authorization to occur.

Claim 31: Wasilewski (5,420, 866) in view of Pinder (5,742,()77) further in view of Welmer teaches claim 30. Wasilewski fails to teach a step of receiving, an entitlement management message over an out of band data link. Pinder teaches an out--of-band data receiver for receiving commands and data over a digital data channel (col. 1.2, line 44-49 and col. 12, line 25-36). It

would have been obvious to modify Wasilewski's module to control the processor and decrypt

the encrypted message to include Pinder's out-of-band receiver for entitlements on an

out-of-band data link to allow for authorization to occur without revealing the frequency of the

audio/video broadcast.

Claim 32: Wasilewski (5,420, 866) in view of Pinder (5,742,677) further in view of Welmer

teaches claim 30. Wasilewski fails to teach a step of receiving an entitlement management

message includes receiving the entitlement management message incorporated in a data packet

associated with each frequency that is tunable by a tuner. Pinder teaches a tuner tunable

according to a channel selection. It would have been obvious to modify Wasilewski's module to

control the processor and decrypt the encrypted message to include Pinder's tunable frequencies

to allow the designated broadcast to be obtained after authorization and the release of the

audio/video broadcast frequencies.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tracey Akpati whose telephone number is 703-305-7820. The

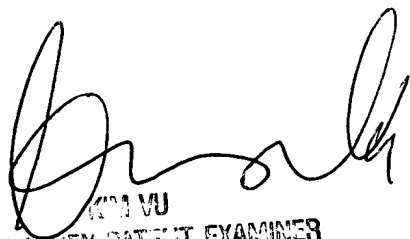examiner can normally be reached on 8.30am-6.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

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OTA

February 5, 2004

VU
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